



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,656	03/01/2004	Chirag D. Dalal	VRT0126US	9561
60429 7590 02/06/2008 CAMPBELL STEPHENSON LLP 11401 CENTURY OAKS TERRACE BLDG. H, SUITE 250 AUSTIN, TX 78758			EXAMINER LI, ZHUO H	
			ART UNIT 2185	PAPER NUMBER
			MAIL DATE 02/06/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

AK

Office Action Summary	Application No. 10/790,656	Applicant(s) DALAL ET AL.	
	Examiner Zhuo H. Li	Art Unit 2185	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This Office action is in response to amendment filed 11/20/2007.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 8-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Young (US PAT. 5,946,696).

Regarding claim 8, Young discloses a method comprising a computer system (200, figure 2) creating a first storage object (original object 100, figure 1A), wherein the first storage object is created to have a individual or collective properties (120, figure 1E and col. 3 lines 32-38, i.e., unmodified properties of object 100 including border, border size, font, text size, text justification and style), the computer system creating a second storage object (modified object 100, figure 1B) out of the first storage object, wherein the second storage object depends on the individual or collective properties of the first storage object (col. 3 lines 36-40, i.e., modified

object having modified property list 122 including the same properties on border size font and text size as the original object), and the computer system receiving information that at least one of the individual or collective properties of the one or more first storage objects has changed (figure 1E and col. 3 lines 23-27, difference property list 124 indicates one of the individual or collective properties of the one or more first storage objects 120, including border, text justification and style, has changed) and that the second object can no longer depend on the individual or collective properties of the one or more first storage object (figure 1E and col. 3 lines 40-45, i.e., each property that was modified contains the new value), the computer system responding after receiving the information (figure 1B, displaying the modified object in response to modified property list 122).

Regarding claim 9, Young discloses the computer responding comprising generating a message indicating that warning that the second storage object can no longer depend on the individual or collective properties of the one or more first storage object (figure 1E and col. 3 lines 40-45, i.e., differences 124 indicating the second object as shown in figure 1B having the properties on border, text justification and style, are no longer depending on the properties of the one or more first storage object 120).

Regarding claims 10-11, Young discloses the computer responding comprising replacing the storage object with a new storage object, which modifies the storage object (figures 1A-1B).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-5, 12-16 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russell (US PAT. 6,826,600) in view of Bulusu et al. (US PAT. 6,065,011 hereinafter Bulusu).

Regarding claim 1, Russell discloses a method comprising a computer system (100, figure 1) creating a first storage object (150, figure 1), wherein the first storage object is created to have a property (152, see col. 10 lines 58-61 and col. 14 lines 13-18, i.e., a client computer system operating software to generate local object definitions and object property 152 being a local object identification that identifies the local object definitions), the computer system creating a second storage object (160, figure 1) out of the first storage object (col. 11 lines 2-10 and col. 14 lines 29-54, i.e., a sever creating a global object specification corresponding local object definitions), and the computer system modifying the first storage object, wherein the modified first storage object maintains the property upon which the second storage object

depends (col. 11 lines 10-24, col. 14 lines 55-62 and col. 15 lines 16-22, i.e., providing new global object specification object definitions to the client and replacing the local object specification with the new global object specification). Russell differs from the claimed invention in not specifically teaching the second storage object comprising a component storage object and the computer system choosing the first storage object to be the component storage object due to the property of the first storage object. However, Bulusu teaches a method for manipulating a categorized data set (read as second object) based upon an original data set (read as first object) such that the categorized data set comprises category item (read as a component storage object) and a computer system selecting the original data set to be the category item due to the property of the original data set (col. 10 lines 31-67), thereby efficiently manipulating large categorized objects in memory. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Russell in having the second storage object comprising a component storage object and the computer system choosing the first storage object to be the component storage object due to the property of the first storage object, as per teaching of Bulusu, in order to efficiently manipulate large categorized objects in memory.

Regarding claim 2, Russell discloses the computer system creating a third storage object, wherein the third storage object is created to have a property (col. 19 lines 28-56, i.e., creating a new object specification once a collaboration session is underway), wherein the computer system creates the second storage object out of the first and third storage object, wherein the second storage object depends on the properties of the first and third objects (col. 20 lines 1-62, i.e., server 130 creating a new object definitions, read as third storage object, within the global object

identification, read as second storage object based on the command or other instruction from client such that the new object definition includes a new unique global object definition and any object properties specified in the object operation are also included as object properties).

Regarding claim 3, Russell teaches the steps of creating the first storage object comprising creating a first description of the first object and transmitting all or a portion of the first description to a first computing system (col. 10 line 58 through col. 11 line 2), and creating the second storage object comprising creating a second description of the first storage object and transmitting all or a portion of the second description to a second computer system (col. 11 lines 2-12).

Regarding claim 4, Russell teaches the step of modifying the first storage object comprising creating a modified first description of the modified first storage object and transmitting the modified first description to the first computer system (col. 11 lines 13-24).

Regarding claim 5, Russell teaches the second description comprising a configuration map that maps a local memory block of the second storage object to a logical memory block of the first storage object (col. 18 lines 1-11).

Regarding claim 12, the limitations of the claim are rejected as the same reasons as set forth in claim 1.

Regarding claim 13, the limitations of the claim are rejected as the same reasons as set forth in claim 2.

Regarding claim 14, the limitations of the claim are rejected as the same reasons as set forth in claim 3.

Regarding claim 15, the limitations of the claim are rejected as the same reasons as set forth in claim 4.

Regarding claim 16, the limitations of the claim are rejected as the same reasons as set forth in claim 5.

Regarding claims 19-21, the limitations of the claims are rejected as the same reasons as set forth in claim 1.

6. Claims 6-7 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russell (US PAT. 6,826,600) in view of in view of Bulusu et al. (US PAT. 6,065,011 hereinafter Bulusu) as applied in claims above, and further in view of Furuhashi et al. (US 2003/0229698 hereinafter Furuhashi).

Regarding claims 6-7, the combination of Russell and Bulusu differs from the claimed invention in not specifically teaching creating the first storage object comprising allocating a logical unit or a physical storage device of a data storage subsystem to the first storage object, wherein the first description comprises a configuration map that maps a logical memory block of the first storage object to a logical memory block of the logical unit or to a physical memory block of the physical storage device. However, Furuhashi teaches information processing system having data storage area allocating unit (224, figure 1), read as a logical unit, for mapping a logical memory block of a first storage object to a logical memory block of the logical unit ([0045], i.e., allocating unit specifies a position of a storage area to which the data is stored in respond of read kind or utilization purpose on the bases of characteristic information of the memory device) in order to improve the access performance to data and its reliability in a

technique of allocating data to a plurality of storage areas of a storage. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the combination of Russell and Bulusu in creating the first storage object comprising allocating a logical unit or a physical storage device of a data storage subsystem to the first storage object, wherein the first description comprises a configuration map that maps a logical memory block of the first storage object to a logical memory block of the logical unit or to a physical memory block of the physical storage device, as per teaching of Furuhashi, in order to improve the access performance to data and its reliability in the technique of allocating the data to the plurality of storage areas of the storage.

Regarding claims 17-18, the limitations of the claims are rejected as the same reasons as set forth in claims 6-7.

Response to Arguments

7. Applicant's arguments filed 11/20/2007 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a hard disk, JBOD storage system, RAID storage system, a data mirror) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Note the claimed language of claim 8 does not specifically

define storage object being stored in a specific storage system. Thus, Young teaches the broad claimed limitations as recited in claim 8.

In response to applicant's argument that the interpretation of Young asserted by the Office leads a contradiction, examiner respectfully disagreed because the Office action clearly indicated that the computer system creating a second storage object (modified object 100, figure 1B) out of the first storage object, wherein the second storage object depends on the individual or collective properties of the first storage object (col. 3 lines 36-40, i.e., modified object having modified property list 122 including the same properties on border size font and text size as the original object), and the computer system receiving information that at least one of the individual or collective properties of the one or more first storage objects has changed (figure 1E and col. 3 lines 23-27, difference property list 124 indicates one of the individual or collective properties of the one or more first storage objects 120, including border, text justification and style, has changed) and that the second object can no longer depend on the individual or collective properties of the one or more first storage object (figure 1E and col. 3 lines 40-45, i.e., each property that was modified contains the new value such that output of the second storage object is different from the output of the first storage object) as recited in claim 8. Furthermore, the Office did not address both the second storage object depends and no longer depends on the properties of the first storage object. In fact, the Office action merely explained Young teaching to create an original storage object including an original property list (120, figure 1E), create a modified object including a modified property list (122, figure 1), read as a second storage object, from the original storage object, wherein the modified property list contains the same elements as indicated in the original storage property list and the second storage object can no

longer depend on the individual or collective properties of one or more first storage objects in response differences or changes. Thus, the interpretation of Young by the Office action is consistent and Young is read on the claimed invention as recited in claim 8.

In response to applicant's argument that Bulusu fails to teach the limitation of claim 1 of "the computer system choosing the first storage object to be the component storage object due to the property of the first storage object", it is noted that Bulusu clearly teaches to manipulate a categorized data set (read as second object) based upon an original data set (read as first object), which the categorized data set comprises category item (read as a component storage object) and a computer system selecting the original data set to be the category item due to the property of the original data set (col. 10 lines 31-67, i.e., categorized data set would include groups of task based upon values of the selected property of the original data set 38 such that one skill in the art would recognize Bulusu teaching to select the original data set to be the category item due to the values of the selected property of the original data set. Thus, the combination of Russell and Bulusu teaches the claimed invention as recited in claims 1-5, 12-16 and 19-21.

In response to applicant's argument that the modification of Russell proposed by the Office action would result in an invention that fails to perform the function for which the invention of Russell was designed according to the principles of Russell, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In addition, Russell clearly teaches to copy all the object properties

from each respective local object definition into a set of respective global object properties in newly defined respective set of global object definitions (col. 14 lines 22-28). Thus, the global object definitions of Russell obviously comprise local object definitions and the claimed invention are taught by the combination of Russell and Bulusu.

Based on the reasons as shown above, Examiner maintained the rejection on the grounds that claims 6-7 and 17-18 are dependent upon one of rejected base claims 1 and 12.

Conclusion.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zhuo H. Li whose telephone number is 571-272-4183. The examiner can normally be reached on Tues - Fri 9:00am - 6:30pm and alternate Monday.

Application/Control Number:
10/790,656
Art Unit: 2185

Page 12

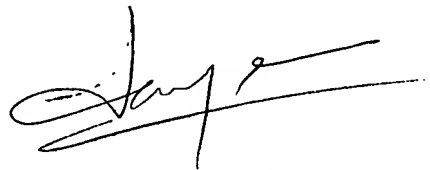
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sanjiv Shah, can be reached on 571-272-4098. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Zhuo H. Li



Patent Examiner



SANJIV SHAH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100